

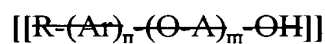
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A formulation comprising:

(i) alkyl-substituted aryl polyalkoxylate of the formula



where

R is a polyalkene radical derived from C₂- to C₂₀-alkenes and having a number average molecular weight of from about 200 to about 5,000;

Ar is selected from a phenylene group, a substituted phenylene group, and a polynuclear aromatic group;

A is an alkylene group of 2 to 8 carbon atoms;

m is a number from 1 up to 200; and

~~n is 1 or 2.~~

(ii) at least one unreacted polyalkene radical derived from C₂- to C₂₀-alkenes.

Claim 2 (currently amended): ~~An A formulation according to claim 1, wherein the polyalkene alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which R is a~~

polybutyl or polyisobutyl radical derived from isobutene and up to about 20 percent by weight of *n*-butene and having a number average molecular weight of from about 200 to about 2500.

Claim 3 (currently amended): ~~An~~ A formulation according to claim 1, wherein alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which R is a polybutyl and Ar is cresol, wherein the combined or polyisobutyl-cresol has radical having a number average molecular weight of about 208, and the unreacted polyisobutyl radical in the formulation has a number average molecular weight of about 325, from about 400 to about 1250.

Claim 4 (currently amended): A formulation according to claim 1, wherein ~~An alkyl-~~ substituted aryl polyalkoxylate as claimed in claim 1, in which R is a polybutyl or polyisobutyl radical having a number average molecular weight of from about 450 to about 1000.

Claim 5 (currently amended): A formulation according to ~~An alkyl-substituted aryl polyalkoxylate as claimed in claim 1,~~ wherein ~~in which~~ m is a number up to about 45.

Claim 6 (currently amended): A formulation according ~~An alkyl-substituted aryl polyalkoxylate as claimed in claim 1,~~ in which A is 1,2-propylene and/or 1,2-butylene.

Claim 7 (original): An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which Ar is a phenol.

Claim 8 (currently amended): A formulation according to ~~An alkyl-substituted aryl polyalkoxylate as claimed in claim 1,~~ in which Ar is a hydrocarbon-substituted phenol.

Claim 9 (currently amended): A formulation according to ~~An alkyl-substituted aryl polyalkoxylate as claimed in claim 1,~~ in which Ar is a cresol.

Claim 10 (currently amended): A formulation according to ~~An alkyl-substituted aryl polyalkoxylate as claimed in claim 1~~, in which Ar is a hydrocarbon-substituted cresol.

Claim 11 (currently amended): A fuel additive concentrate comprising a formulation according to an alkyl-substituted aryl polyalkoxylate of claim 1 in an amount of from about 0.1 to about 80% by weight.

Claim 12 (original): A fuel additive concentrate comprising an alkyl-substituted aryl polyalkoxylate of claim 1 in an amount of from about 0.1 to about 80% by weight.

Claim 13 (currently amended): A fuel composition comprising a formulation according to an alkyl-substituted aryl polyalkoxylate of claim 1, and a fuel.

Claim 14 (original): The composition of claim 13, wherein the fuel is gasoline.

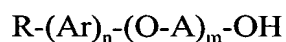
Claim 15 (original): The composition of claim 13, wherein the fuel is diesel fuel.

Claim 16 (original): The composition of claim 13, wherein the fuel is burner fuel.

Claim 17 (original): The composition of claim 13, wherein the fuel is jet fuel.

Claim 18 (currently amended): A process for reducing the formation of intake valve deposits in a gasoline engine, comprising combusting in a gasoline engine having intake valves a fuel composition comprising a gasoline fuel and

(i) an alkyl-substituted aryl polyalkoxylate of the formula



where

R is a polyalkene radical derived from C₂- to C₂₀-alkenes and having a number average molecular weight of from about 200 to about 5,000;

Ar is selected from a phenylene group, a substituted phenylene group, and a polynuclear aromatic group;

A is an alkylene group of 2 to 8 carbon atoms;

m is a number up to 200; and

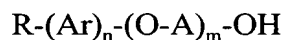
n is 1 ~~or 2~~; and

(ii) at least one unreacted polyalkene radical derived from C₂- to C₂₀-alkenes,

whereby the amount of deposits formed on the intake valves are reduced relative to the amount of deposits formed on the intake valves when the fuel composition combusted in the engine does not comprise the alkyl-substituted aryl polyalkoxylate.

Claim 19 (currently amended): A process for reducing the valve sticking in a gasoline engine, comprising combusting in a gasoline engine having intake valves a fuel composition comprising a gasoline fuel and

(i) an alkyl-substituted aryl polyalkoxylate of the formula



where

R is a polyalkene radical derived from C₂- to C₂₀-alkenes and having a number average molecular weight of from about 200 to about 5,000;

Ar is selected from a phenylene group, a substituted phenylene group, and a polynuclear aromatic group;

A is an alkylene group of 2 to 8 carbon atoms;

m is a number up to 200; and

n is 1 or 2; and

(ii) at least one unreacted polyalkene radical derived from C₂- to C₂₀-alkenes, whereby the amount of sticking of the intake valves is reduced relative to the amount of sticking of the intake valves when the fuel composition combusted in the engine does not comprise the alkyl-substituted aryl polyalkoxylate.

Claim 20 (original): The composition of claim 13, further comprising a detergent.

Claim 21 (original): The composition of claim 20, wherein the detergent is selected from polyisobuteneamines, hydroxyl-containing polyisobuteneamines, polyetheramines, and polyalkenyl Mannich bases.

Claim 22 (original): The composition of claim 20, wherein the detergent is a polyalkenyl Mannich base.

Claim 23 (original): The composition of claim 20, further comprising one or more components selected from alkali metal salts of carboxylic acids or esters, alkaline earth metal salts of carboxylic acids or esters, alkali metal salts of sulfosuccinic acids or esters, alkaline earth metal salts of sulfosuccinic acids or esters, diluents, corrosion inhibitors, film-forming ammonium salts of organic carboxylic acids or esters, heterocyclic aromatics, antioxidants, stabilizers, demulsifiers, antistatic agents, metallocenes, lubricity additives, and markers.

Claim 24 (currently amended): A formulation ~~An alkyl-substituted aryl polyalkoxylate~~ as claimed in claim 1, in which m is between 16 and 32.

Claim 25 (currently amended): A formulation ~~An alkyl-substituted aryl polyalkoxylate~~ as claimed in claim 1, in which m is 16-28.

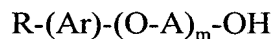
Claim 26 (currently amended): A formulation ~~An alkyl-substituted aryl polyalkoxylate~~ as claimed in claim 1, in which m is about 24.

Claim 27 (currently amended): A formulation ~~An alkyl-substituted aryl polyalkoxylate~~ as claimed in claim 1, in which A is a 1,2-propylene group.

Claim 28 (currently amended): A formulation ~~An alkyl-substituted aryl polyalkoxylate~~ as claimed in claim 1, in which A is selected from the group consisting of 1,4-butylene, 1,6-hexylene, 1,8-octylene and a mixture of any thereof.

Claim 29 (previously presented): The composition of claim 13, wherein said detergent comprises at least one member selected from the group consisting a polyisobuteneamines, hydroxyl containing polyisobuteneamines, and polyetheramines.

Claim 30 (new): An alkyl-substituted aryl polyalkoxylate of the formula



where

R is a polyisobutylene;

Ar is cresol;

A is an alkylene group of 2 to 8 carbon atoms;

m is a number from 1 to 200; and

wherein when combined, R and Ar have a number average molecular weight of about 208.

Appl. No. 10/046,823

Amendment to the Claims dated September 13, 2004

Reply to Paper dated September 7, 2004

Claim 31 (new): The reaction products obtained by the process of reacting a polyisobutylene-cresol having a number average molecular weight of about 208 with liquified propylene oxide in the presence of a catalyst.